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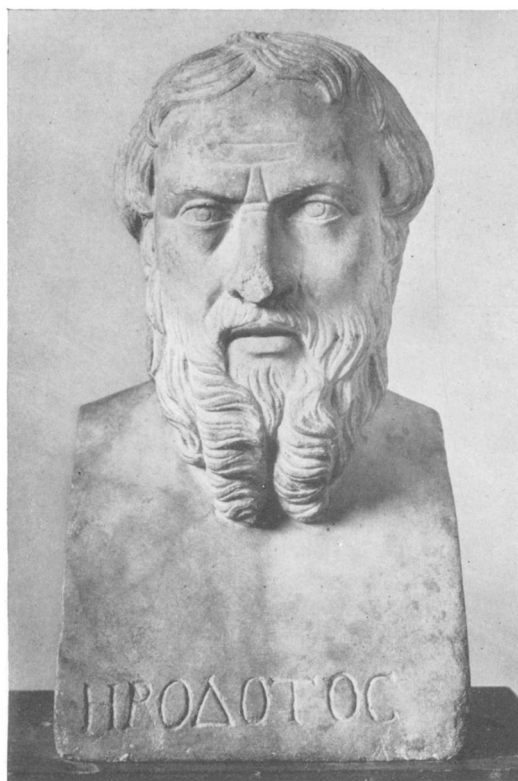
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illustrates is technically too late for fifth-century portraiture. Consequently the most we can claim for it is that it does give us what was the accepted likeness of Herodotos in later antiquity. For this reason, and for its comparative rarity, it is an important and welcome member of our classical collection, and it has therefore been

many different patterns, their attractive shapes, have long made them the favorites among glass collectors. Their somewhat complicated technique has likewise contributed to their interest. The collection of these vases in our Museum (Ninth Room of Classical Wing, Case J), made up of examples from the Charvet and Gréau



BUST OF HERODOTOS
PROBABLY II CENTURY A. D.

accorded the somewhat belated honor of a place in the Room of "Recent" Accessions.

E. R.

"MILLEFIORI" OR MOSAIC GLASS

AMONG the many wonderful products of the ancient glass industry the most beautiful and highly prized are undoubtedly the mosaic or "millefiori" vases. The richness and variety of their colors, their

Collections as well as from recent purchases, is now of considerable importance. The accession of another small bowl this year and the placing on exhibition of a large number of fragments from the Gréau Collection (in Case E), may serve as an occasion for discussing a highly interesting aspect of these vases.

Roman writers often refer in terms of great admiration to "murrhine" vases (variously called murrha, murrhina, *μωρρήα*,

μορρίνη [λίθια]). We are told that these vessels were brought to Rome in the time of Pompey (Pliny, *Natural History* xxxvii, 7), and that they immediately enjoyed immense popularity. They are often mentioned along with gold and crystal vessels as precious possessions. Augustus selected for himself one murrhine cup from the household effects left by Cleopatra to the Roman victors (Suetonius, *Augustus*, 71). Wealthy collectors paid extravagant prices for these vases, Nero, as usual, out-doing everyone by paying 100 talents (probably about \$118,200) for one cup. Nero, indeed, appears to have been particularly keen and unscrupulous in his acquisition of these treasures. We hear, for instance, that he confiscated a famous collection of murrhina on the death of its owner, taking it from the rightful heirs, to display it in his private theatre. The rich Petronius, fearing a similar fate, broke a murrhine basin valued at 300 talents rather than let it fall into Nero's hands.

Our curiosity is naturally stirred by such accounts, and we wonder what these vessels were, of what they were made, and above all, whether any specimens have survived to our day. The most prevalent theory until recently was that they were some variety of natural stone, such as agate, sardonyx, or jade; others thought that they were Chinese porcelains! But a careful examination of the evidence at our disposal makes such theories unlikely. If the murrhine vessels were of hard stone, how could the man that Pliny tells of have bitten off the edge of a cup while drinking? How could they have been valued on account of their fragility (. . . quibus pretium faceret ipsa fragilitas, Pliny, *Natural History* xxxiii, 2); or been "fired" in Parthian kilns (murrea in Parthis pocula cocta focus, Propertius, *Elegies* iv,

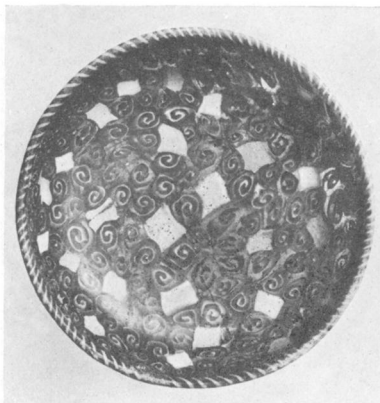
5, 26); and why should Sidonius Apollinaris (*Carmen* xi, 20 ff.) in enumerating the materials used as inlay on the door of Vulcan's house expressly distinguish between murrhina and sardonyx and agate, if they are identical?

The most important passage for the identification of the murrhina is Pliny's detailed description of them in his *Natural History* xxxvii, 8: "Their brilliance is not great; they have lustre rather than brilliance. What gives them their value is

the variety of color, the spots passing from purple into clear white and again to a combination of the two which varies from fiery purple to milky white tinged with red. Some collectors especially admire the edges and a certain refraction to be found there, like that of the rainbow; others the denser spots, and to them translucence or pallor is a blemish." Pliny's word *maculae*, "spots," is important and agrees with Mar-

tial's references to murrhine vases as *maculosae*, "spotted," or *picta*, "many-colored." These are none of them epithets we should apply to agate or sardonyx, which are veined rather than spotted.

What, then, could the murrhina have been? There is, of course, the possibility that we do not know and cannot know since they have all been lost. But is it likely that with the known popularity of these vases, not one, not even a small fragment, should have been preserved? It would be unsatisfactory to have to believe it. But there is no need to do so. We actually possess a large number of beautiful specimens and numerous fragments of another type of vases dating from the exact period in which the murrhina were popular, and which, moreover, closely correspond with the descriptions we have of them. These are the millefiori or mosaic glasses. They certainly have lustre rather than



"MILLEFIORI" BOWL
FROM THE CHARVET COLLECTION

brilliance; they have great variety of color and these colors melt one into the other; they have opaque and translucent spots; and the edges are often specially attractive, showing patterns in different colors. Fragility is of course characteristic of them, and even Martial's remark that murrhina are recommended for warm drinks becomes appropriate, since glass retains heat better than stone. So striking is the similarity between the murrhina as described and our millefiori glass that even some of the upholders of "stone" murrhina have admitted

an artificial product. Again he tells us that these vases come from the East, especially from Parthia, which country has no special connection with the mosaic glass vases. But we have learned by experience not to take Pliny's science and geography very seriously, so that his remarks on these subjects carry little weight nowadays. Indeed at a later date Julius Capitolinus speaks of "murrinos et crystallinos Alexandrinos,"¹ and Alexandria, or rather the whole of Egypt, is just the place in which we know that mosaic glass was invented.



"MILLEFIORI" BOWL
FROM THE CHARVET COLLECTION

that the millefiori vases must be glass imitations. It was Kisa in his well-known book on ancient glass¹ who came out boldly with the theory that the millefiori glasses and the murrhine vases must be identical. And his theory will probably meet with general acceptance.

The only evidence against the case is, first, that it is surprising that glass vases should have been so highly prized by the luxurious Romans to whom vessels of gold and silver and of precious stones were the order of the day; second, that certain statements by Pliny clearly point to the fact that he at least did not think the vessels were of glass. When he says, for instance, that we dig murrhine and crystal vases out of the earth (Pliny, *Natural History*, xxxiii, 2) or refers to murrhine vessels as "composed of a liquid under the surface of the earth which is condensed by heat," he is clearly thinking of a natural, not

The confusion of the ancients on the subject of glass is, moreover, well shown by Pausanias' remark (viii, 18): "glass, crystal, murrhina, and what else is made by men of stone" ("Υἄλος μὲν καὶ χρυστάλλος καὶ μορρία καὶ ὅσα ἐστὶν ἀνθρώποις ἄλλα λίθου ποιούμενα). Glass was apparently in their minds a kind of stone, as is shown by the expression *χυτὴ λίθος*, molten stone, for opaque glass. It is, in fact, what we should expect that the knowledge of glass was somewhat hazy at that period, for glass-blowing was then a very recent invention and had opened up vast possibilities in the manufacture of glass products. Small wonder that the material was not always recognized in its many new aspects. Even to the modern eye millefiori glass, especially when opaque, looks remarkably like stone. It is natural, also,

¹It is, of course, not certain that the adjective *Alexandrinos* refers here to murrinos as well as to crystallinos; but it quite probably does.

¹Das Glas im Altertume (1908), pp. 531 ff.

that merchants should have traded on the ignorance of clients who cared more for the value of the material than for artistic effect, and should have invented mysterious tales of the origin of their wares. Pliny himself tells us that glass pastes were often sold in his time for precious stones.

The objections therefore against the identification of millefiori glass with the murrhina of the ancients are not serious, while the arguments in favor of it appear convincing. It would seem, then, that we have here a case—so rare in the minor arts of the ancients—where literature directly supplements our knowledge derived from excavations; and it certainly adds to the interest of our mosaic glass to know how much it was esteemed in ancient times (even though some of the old enthusiasts were fooled as to the material!). The most remarkable pieces were smashed long ago. None of the large heavy basins (the "murrhas graves,"

the "maxima murrhina") of which Roman writers speak so admiringly have been preserved. But the beautiful color effects can be appreciated even in the more modest examples in our museums. We moderns at least have not produced anything comparable. The Venetians and others have successfully imitated the technique; but the colors are crude and garish when viewed side by side with the rich, deep hues of the Roman mosaic glass. G. M. A. R.

DRAWINGS AMONG THE RECENT ACCESSIONS

BESIDES the Annunciation commented upon in the June number of the BULLETIN,¹ the group of drawings bought out of the Pembroke Collection includes two other works by Correggio—the Adoration of the

Kings and a Sketch for a Trophy, both executed in red chalk and both bearing the mark of the Sir Peter Lely Collection, the greatest of the English collections of the time of Charles II. The Adoration is the earliest known drawing by Correggio, dating from before the time of the Museum painting by Correggio, the Four Saints, which was done about 1515 in the artist's nineteenth year. The drawing shows more clearly even than the painting the Ferrarese origin of his art. The Trophy is made up of Cupids, Satyrs, and emblems, and on the same sheet is a rapid indication of a man and



JACOB ASLEEP
BY ANNIBALE CARRACCI
BOLOGNESE SCHOOL

a child. In T. S. Moore's catalogue of Correggio's works the Trophy is dated between 1530 and 1534.

A brilliant drawing by Annibale Carracci hangs near these in the present exhibition. The landscape, the important part of the work, is inspired by Titian and Campagnola. A great tree grows by the side of a pool and on its banks is Jacob asleep—the

¹Drawings from the Pembroke Collection, p. 136.